



#2 OIPE

DATE: 12/07/2001 RAW SEQUENCE LISTING PATENT APPLICATION: US/09/997,664 TIME: 13:03:07

Input Set : A:\BC1018 US CIP Seq Listing.txt Output Set: N:\CRF3\12072001\I997664.raw



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3 <110> APPLICANT: Ben-Bassat, Arie
              Cattermole, Monica
      4
      5
              Gatenby, Anthony A.
      6
              Gibson, Katherine J.
              Ramos-Gonzalez, Isabel
      8
              Ramos, Juan
              Sariaslani, Sima
      9
     11 <120> TITLE OF INVENTION: Method for the Production of p-Hydroxybenzoate in Species of
             Pseudomonas and Agrobacterium
     14 <130> FILE REFERENCE: BC1018 US CIP
C--> 16 <140> CURRENT APPLICATION NUMBER: US/09/997,664
C--> 17 <141> CURRENT FILING DATE: 2001-11-28
     19 <150> PRIOR APPLICATION NUMBER: 09/585,174
     20 <151> PRIOR FILING DATE: 2000-06-01
     22 <160> NUMBER OF SEQ ID NOS: 112
     24 <170> SOFTWARE: Microsoft Office 97
     26 <210> SEO ID NO: 1
     27 <211> LENGTH: 6491
     28 <212> TYPE: DNA
     29 <213> ORGANISM: Pseudomonas mendocina KR-1
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169	Ser	Ala			Pro	Glu	Gly	_		Ala	Ser	Leu	_		Ala	Gly
	Pro	_	115 Leu	His	Met	Leu		120 Gly	Met	Val	Asn		125 Glu	Väl	Val	Arg
173 175	Phe	130	Tle	Δsn	Ser	Ser	135	Glv	Нic	Phe	Tur	140 Ser	Glu	Phe	Phe	Ψrn
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182				180					185					190		
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188		210					215					220				
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		Com	7 ~~~	Com	mbs		C1	Com	7 l a	7 00		mb m	C1.,	Mo+	7] -	
193	Leu	ser	Arg	ser	245	Tyr	СТА	ser	Ald	250	GIU	THE	GIU	мес	Ala 255	ASP
196	Leu	Asp	Glu	${\tt Pro}$	Pro	Glu	Asp	Gln	Ala	Met	Val	Gly	Ile	Ser	Ala	Ala
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199	Phe	Val	Ala	Ala	Ser	Gln	Gln	Leu	${ t Tyr}$	Arg	Val	Ala	Ser	Thr	Gln	Ala
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203	•	290	T	TT -	01	71-	295	D	3	3	01	300	D	T	77 1	31 -
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206		3	0	31.	71.	310	Dwa	01	m1	т	315	a 1	31.	a 1	T	320
208	Leu	ASI	Cys	Ala	325	Leu	PIO	GIU	THE	330	Leu	GIU	Ald	GIU	Leu 335	Pne
	Gl _V	Val	G1n	λra		λl a	Dho	Thr	C117		λen	λκα	Cor	λκα	Pro	Cl v
212	GIY	Val	Giu	340	Gry	AIG	FIIC	1111	345	Ата	кэр	Arg	261	350	PIO	СТУ
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221						390	1	2			395		-,			400
		Val	Ile	Ala	Ala		Asn	Leu	Asp	Leu		Arq	Glu	Val	Glu	
224	_				405				-	410	_	_			415	
226	Gly	Arg	Phe	Arg	Glu	Asp	Leu	Leu	Tyr	Arg	Leu	Asn	Val	Phe	Pro	Ile
227				420				•	425					430		
229	His	Leu	${\tt Pro}$	${\tt Pro}$	Leu	Arg	Glu	Arg	Arg	Glu	Asp	Ile	${\tt Pro}$	Leu	Leu	Met
230			435					440					445			
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242		-		500				-	505					510		-
	Glu	Pro	Leu		Ser	Ser	Glv	Tle		T.eu	Thr	Δla	Glu		Arg	Len
245	Olu	110	515	**** 9	001	OCI	011	520	011	LCu		1114	525	011	1119	шси
	3.00	71-		C1	C1	C1	Dwo		7 J a	7 ~~	. ז	C1		171	3703	ci.,
	Asp		val	GTA	СТУ	Glu		GIII	АІа	AIG	Ald		val	val	Val	GIU
248		530					535		_	- -	_	540				_
		His	GLu	Pro	Val		Leu	GLY	Leu	Ala		Leu	Gln	Ala	Phe	
	545					550					555					560
253	Ala	Gly	Arg	Asp	Arg	Val	Leu	Gly	Thr	Ser	Leu	Lys	Glu	Ile	Glu	Gln
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256	Arq	Leu	Val	His	Leu	Ala	Leu	Glu	Arg	Thr	Gly	Gly	Asn	Leu	Thr	Ala
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	Two	C111						000					003			
	гуѕ	Gly	GIU.													
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		1> LI			91											
		2> T														
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271 272	1				5					10					15	
271 272 274	1			Trp	5				Ser	10				Glu		
271 272 274 275	1 Ala	Gly	Gln	Trp 20	5 Arg	Ala	Gly	Ser	Ser 25	10 Gly	Arg	Pro	Leu	Glu 30	15 Val	Phe
271 272 274 275 277	1 Ala	Gly	Gln Tyr	Trp 20	5 Arg	Ala	Gly	Ser Leu	Ser 25	10 Gly	Arg	Pro	Leu Leu	Glu 30	15	Phe
271 272 274 275 277 278	1 Ala Asp	Gly Pro	Gln Tyr 35	Trp 20 Asn	5 Arg Asp	Ala Glu	Gly Leu	Ser Leu 40	Ser 25 Leu	10 Gly Arg	Arg Ile	Pro Ala	Leu Leu 45	Glu 30 Ala	15 Val Ser	Phe Arg
271 272 274 275 277 278 280	1 Ala Asp	Gly Pro Asp	Gln Tyr 35	Trp 20 Asn	5 Arg Asp	Ala Glu	Gly Leu Tyr	Ser Leu 40	Ser 25 Leu	10 Gly Arg	Arg Ile	Pro Ala Asp	Leu Leu 45	Glu 30 Ala	15 Val	Phe Arg
271 272 274 275 277 278 280 281	1 Ala Asp Glu	Gly Pro Asp 50	Gln Tyr 35 Leu	Trp 20 Asn Asp	5 Arg Asp Ala	Ala Glu Ala	Gly Leu Tyr 55	Ser Leu 40 Arg	Ser 25 Leu Lys	10 Gly Arg Ala	Arg Ile Arg	Pro Ala Asp 60	Leu Leu 45 Ser	Glu 30 Ala Gln	15 Val Ser Arg	Phe Arg Glu
271 272 274 275 277 278 280 281 283	1 Ala Asp Glu Trp	Gly Pro Asp 50	Gln Tyr 35 Leu	Trp 20 Asn Asp	5 Arg Asp Ala	Ala Glu Ala Pro	Gly Leu Tyr 55	Ser Leu 40 Arg	Ser 25 Leu Lys	10 Gly Arg Ala	Arg Ile Arg Arg	Pro Ala Asp 60	Leu Leu 45 Ser	Glu 30 Ala Gln	15 Val Ser	Phe Arg Glu Ala
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271 272 274 275 277 278 280 281 283 284 286	1 Ala Asp Glu Trp 65	Gly Pro Asp 50 Ala	Gln Tyr 35 Leu Thr	Trp 20 Asn Asp	5 Arg Asp Ala Ala	Ala Glu Ala Pro 70	Gly Leu Tyr 55 Ala	Ser Leu 40 Arg Glu	Ser 25 Leu Lys Arg	10 Gly Arg Ala Ala	Arg Ile Arg Arg 75	Pro Ala Asp 60 Val	Leu Leu 45 Ser Leu	Glu 30 Ala Gln Leu	15 Val Ser Arg	Phe Arg Glu Ala 80
271 272 274 275 277 278 280 281 283 284	1 Ala Asp Glu Trp 65	Gly Pro Asp 50 Ala	Gln Tyr 35 Leu Thr	Trp 20 Asn Asp	5 Arg Asp Ala Ala	Ala Glu Ala Pro 70	Gly Leu Tyr 55 Ala	Ser Leu 40 Arg Glu	Ser 25 Leu Lys Arg	10 Gly Arg Ala Ala	Arg Ile Arg Arg 75	Pro Ala Asp 60 Val	Leu Leu 45 Ser Leu	Glu 30 Ala Gln Leu	15 Val Ser Arg	Phe Arg Glu Ala 80
271 272 274 275 277 278 280 281 283 284 286 287	Asp Glu Trp 65 Val	Gly Pro Asp 50 Ala	Gln Tyr 35 Leu Thr	Trp 20 Asn Asp Thr	Asp Ala Ala Asp 85	Ala Glu Ala Pro 70 Glu	Gly Leu Tyr 55 Ala Arg	Ser Leu 40 Arg Glu Arg	Ser 25 Leu Lys Arg Glu	10 Gly Arg Ala Ala Glu 90	Arg Ile Arg Arg 75 Ile	Pro Ala Asp 60 Val Ile	Leu 45 Ser Leu Asp	Glu 30 Ala Gln Leu Trp	15 Val Ser Arg Glu	Phe Arg Glu Ala 80 Ile
271 272 274 275 277 278 280 281 283 284 286 287	Asp Glu Trp 65 Val	Gly Pro Asp 50 Ala	Gln Tyr 35 Leu Thr	Trp 20 Asn Asp Thr	Asp Ala Ala Asp 85	Ala Glu Ala Pro 70 Glu	Gly Leu Tyr 55 Ala Arg	Ser Leu 40 Arg Glu Arg	Ser 25 Leu Lys Arg Glu	10 Gly Arg Ala Ala Glu 90	Arg Ile Arg Arg 75 Ile	Pro Ala Asp 60 Val Ile	Leu 45 Ser Leu Asp	Glu 30 Ala Gln Leu Trp	15 Val Ser Arg Glu	Phe Arg Glu Ala 80 Ile
271 272 274 275 277 278 280 281 283 284 286 287 289	Asp Glu Trp 65 Val	Gly Pro Asp 50 Ala Lys Glu	Gln Tyr 35 Leu Thr Ile Ser	Trp 20 Asn Asp Thr Phe Gly 100	5 Arg Asp Ala Ala Asp 85 Ser	Ala Glu Ala Pro 70 Glu Thr	Gly Leu Tyr 55 Ala Arg	Ser Leu 40 Arg Glu Arg Ile	Ser 25 Leu Lys Arg Glu Lys 105	10 Gly Arg Ala Ala Glu 90 Ala	Arg Ile Arg 75 Ile Gln	Pro Ala Asp 60 Val Ile	Leu 45 Ser Leu Asp Glu	Glu 30 Ala Gln Leu Trp	15 Val Ser Arg Glu Ile 95 Gly	Phe Arg Glu Ala 80 Ile Ala
271 272 274 275 277 278 280 281 283 284 286 287 289 290 292	Asp Glu Trp 65 Val	Gly Pro Asp 50 Ala Lys Glu	Gln Tyr 35 Leu Thr Ile Ser Ala	Trp 20 Asn Asp Thr Phe Gly 100	5 Arg Asp Ala Ala Asp 85 Ser	Ala Glu Ala Pro 70 Glu Thr	Gly Leu Tyr 55 Ala Arg	Ser Leu 40 Arg Glu Arg Ile Ser	Ser 25 Leu Lys Arg Glu Lys 105	10 Gly Arg Ala Ala Glu 90 Ala	Arg Ile Arg 75 Ile Gln	Pro Ala Asp 60 Val Ile	Leu 45 Ser Leu Asp Glu Asn	Glu 30 Ala Gln Leu Trp	15 Val Ser Arg Glu	Phe Arg Glu Ala 80 Ile Ala
271 272 274 275 277 278 280 281 283 284 286 287 289 290 292 293	1 Ala Asp Glu Trp 65 Val Arg	Gly Pro Asp 50 Ala Lys Glu Arg	Gln Tyr 35 Leu Thr Ile Ser Ala 115	Trp 20 Asn Asp Thr Phe Gly 100 Ile	5 Arg Asp Ala Ala Asp 85 Ser	Ala Glu Ala Pro 70 Glu Thr	Gly Leu Tyr 55 Ala Arg Arg	Ser Leu 40 Arg Glu Arg Ile Ser 120	Ser 25 Leu Lys Arg Glu Lys 105 Ala	10 Gly Arg Ala Ala Glu 90 Ala Ser	Arg Ile Arg 75 Ile Gln Leu	Pro Ala Asp 60 Val Ile Ile Pro	Leu 45 Ser Leu Asp Glu Asn 125	Glu 30 Ala Gln Leu Trp Trp 110 Arg	15 Val Ser Arg Glu Ile 95 Gly Val	Phe Arg Glu Ala 80 Ile Ala His
271 272 274 275 277 278 280 281 283 284 286 287 290 292 293 295	1 Ala Asp Glu Trp 65 Val Arg	Gly Pro Asp 50 Ala Lys Glu Arg	Gln Tyr 35 Leu Thr Ile Ser Ala 115	Trp 20 Asn Asp Thr Phe Gly 100 Ile	5 Arg Asp Ala Ala Asp 85 Ser	Ala Glu Ala Pro 70 Glu Thr	Gly Leu Tyr 55 Ala Arg Arg Glu Asn	Ser Leu 40 Arg Glu Arg Ile Ser 120	Ser 25 Leu Lys Arg Glu Lys 105 Ala	10 Gly Arg Ala Ala Glu 90 Ala Ser	Arg Ile Arg 75 Ile Gln Leu	Pro Ala Asp 60 Val Ile Ile Pro Glu	Leu 45 Ser Leu Asp Glu Asn 125	Glu 30 Ala Gln Leu Trp Trp 110 Arg	15 Val Ser Arg Glu Ile 95 Gly	Phe Arg Glu Ala 80 Ile Ala His
271 272 274 275 277 278 280 281 283 284 286 287 290 292 293 295 296	Asp Glu Trp 65 Val Arg Ala Gly	Gly Pro Asp 50 Ala Lys Glu Arg Arg 130	Gln Tyr 35 Leu Thr Ile Ser Ala 115 Ile	Trp 20 Asn Asp Thr Phe Gly 100 Ile	Asp Ala Ala Asp 85 Ser Thr	Ala Glu Ala Pro 70 Glu Thr Leu Ser	Gly Leu Tyr 55 Ala Arg Arg Glu Asn 135	Ser Leu 40 Arg Glu Arg Ile Ser 120 Ile	Ser 25 Leu Lys Arg Glu Lys 105 Ala Ser	10 Gly Arg Ala Ala Glu 90 Ala Ser Gly	Arg Ile Arg 75 Ile Gln Leu Lys	Pro Ala Asp 60 Val Ile Ile Pro Glu 140	Leu 45 Ser Leu Asp Glu Asn 125 Ser	Glu 30 Ala Gln Leu Trp Trp 110 Arg	15 Val Ser Arg Glu Ile 95 Gly Val Val	Phe Arg Glu Ala 80 Ile Ala His
271 272 274 275 277 278 280 281 283 284 286 287 290 292 293 295 296 298	Asp Glu Trp 65 Val Arg Ala Gly Arg	Gly Pro Asp 50 Ala Lys Glu Arg Arg 130	Gln Tyr 35 Leu Thr Ile Ser Ala 115 Ile	Trp 20 Asn Asp Thr Phe Gly 100 Ile	Asp Ala Ala Asp 85 Ser Thr	Ala Glu Ala Pro 70 Glu Thr Leu Ser Val	Gly Leu Tyr 55 Ala Arg Arg Glu Asn 135	Ser Leu 40 Arg Glu Arg Ile Ser 120 Ile	Ser 25 Leu Lys Arg Glu Lys 105 Ala Ser	10 Gly Arg Ala Ala Glu 90 Ala Ser Gly	Arg Ile Arg 75 Ile Gln Leu Lys Ser	Pro Ala Asp 60 Val Ile Ile Pro Glu 140	Leu 45 Ser Leu Asp Glu Asn 125 Ser	Glu 30 Ala Gln Leu Trp Trp 110 Arg	15 Val Ser Arg Glu Ile 95 Gly Val	Phe Arg Glu Ala 80 Ile Ala His Tyr
271 272 274 275 277 278 280 281 283 284 286 287 290 292 293 295 296 298 299	Asp Glu Trp 65 Val Arg Ala Gly Arg 145	Gly Pro Asp 50 Ala Lys Glu Arg Arg 130 Ala	Gln Tyr 35 Leu Thr Ile Ser Ala 115 Ile Pro	Trp 20 Asn Asp Thr Phe Gly 100 Ile Ile Leu	Asp Ala Ala Asp 85 Ser Thr Ala Gly	Ala Glu Ala Pro 70 Glu Thr Leu Ser Val 150	Gly Leu Tyr 55 Ala Arg Arg Glu Asn 135 Ile	Ser Leu 40 Arg Glu Arg Ile Ser 120 Ile Gly	Ser 25 Leu Lys Arg Glu Lys 105 Ala Ser Val	10 Gly Arg Ala Ala Glu 90 Ala Ser Gly Ile	Arg Ile Arg 75 Ile Gln Leu Lys Ser 155	Pro Ala Asp 60 Val Ile Ile Pro Glu 140 Pro	Leu 45 Ser Leu Asp Glu Asn 125 Ser Trp	Glu 30 Ala Gln Leu Trp Trp 110 Arg Arg	15 Val Ser Arg Glu Ile 95 Gly Val Val Phe	Phe Arg Glu Ala 80 Ile Ala His Tyr Pro 160
271 272 274 275 277 278 280 281 283 284 286 287 299 292 293 295 296 298 299 301	Asp Glu Trp 65 Val Arg Ala Gly Arg 145	Gly Pro Asp 50 Ala Lys Glu Arg Arg 130 Ala	Gln Tyr 35 Leu Thr Ile Ser Ala 115 Ile Pro	Trp 20 Asn Asp Thr Phe Gly 100 Ile Ile Leu	Asp Ala Ala Asp 85 Ser Thr Ala Gly Ala	Ala Glu Ala Pro 70 Glu Thr Leu Ser Val 150	Gly Leu Tyr 55 Ala Arg Arg Glu Asn 135 Ile	Ser Leu 40 Arg Glu Arg Ile Ser 120 Ile Gly	Ser 25 Leu Lys Arg Glu Lys 105 Ala Ser Val	10 Gly Arg Ala Ala Glu 90 Ala Ser Gly Ile Pro	Arg Ile Arg 75 Ile Gln Leu Lys Ser 155	Pro Ala Asp 60 Val Ile Ile Pro Glu 140 Pro	Leu 45 Ser Leu Asp Glu Asn 125 Ser Trp	Glu 30 Ala Gln Leu Trp Trp 110 Arg Arg	15 val Ser Arg Glu Ile 95 Gly Val Val Phe	Phe Arg Glu Ala 80 Ile Ala His Tyr Pro 160
271 272 274 275 277 278 280 281 283 284 286 287 299 292 293 295 296 298 299 301 302	Asp Glu Trp 65 Val Arg Ala Gly Arg 145 Leu	Gly Pro Asp 50 Ala Lys Glu Arg Arg 130 Ala His	Gln Tyr 35 Leu Thr Ile Ser Ala 115 Ile Pro Leu	Trp 20 Asn Asp Thr Phe Gly 100 Ile Ile Leu Thr	Asp Ala Ala Asp 85 Ser Thr Ala Gly Ala 165	Ala Glu Ala Pro 70 Glu Thr Leu Ser Val 150 Arg	Gly Leu Tyr 55 Ala Arg Glu Asn 135 Ile Ser	Ser Leu 40 Arg Glu Arg Ile Ser 120 Ile Gly Leu	Ser 25 Leu Lys Arg Glu Lys 105 Ala Ser Val	10 Gly Arg Ala Ala Glu 90 Ala Ser Gly Ile Pro 170	Arg Ile Arg 75 Ile Gln Leu Lys Ser 155 Ala	Pro Ala Asp 60 Val Ile Ile Pro Glu 140 Pro Leu	Leu 45 Ser Leu Asp Glu Asn 125 Ser Trp Ala	Glu 30 Ala Gln Leu Trp Trp 110 Arg Arg Asn Leu	15 val Ser Arg Glu Ile 95 Gly Val Val Phe Gly 175	Phe Arg Glu Ala 80 Ile Ala His Tyr Pro 160 Asn
271 272 274 275 277 278 280 281 283 284 286 287 289 290 292 293 295 296 298 299 301 302 304	Asp Glu Trp 65 Val Arg Ala Gly Arg 145 Leu	Gly Pro Asp 50 Ala Lys Glu Arg Arg 130 Ala His	Gln Tyr 35 Leu Thr Ile Ser Ala 115 Ile Pro Leu	Trp 20 Asn Asp Thr Phe Gly 100 Ile Leu Thr Val	Asp Ala Ala Asp 85 Ser Thr Ala Gly Ala 165	Ala Glu Ala Pro 70 Glu Thr Leu Ser Val 150 Arg	Gly Leu Tyr 55 Ala Arg Glu Asn 135 Ile Ser	Ser Leu 40 Arg Glu Arg Ile Ser 120 Ile Gly Leu	Ser 25 Leu Lys Arg Glu Lys 105 Ala Ser Val Ala Asp	10 Gly Arg Ala Ala Glu 90 Ala Ser Gly Ile Pro 170	Arg Ile Arg 75 Ile Gln Leu Lys Ser 155 Ala	Pro Ala Asp 60 Val Ile Ile Pro Glu 140 Pro Leu	Leu 45 Ser Leu Asp Glu Asn 125 Ser Trp Ala	Glu 30 Ala Gln Leu Trp Trp 110 Arg Arg Asn Leu Gly	15 val Ser Arg Glu Ile 95 Gly Val Val Phe	Phe Arg Glu Ala 80 Ile Ala His Tyr Pro 160 Asn
271 272 274 275 277 278 280 281 283 284 286 287 289 290 292 293 295 296 298 299 301 302 304 305	Asp Glu Trp 65 Val Arg Ala Gly Arg 145 Leu Ala	Gly Pro Asp 50 Ala Lys Glu Arg 130 Ala His	Gln Tyr 35 Leu Thr Ile Ser Ala 115 Ile Pro Leu Val	Trp 20 Asn Asp Thr Phe Gly 100 Ile Leu Thr Val 180	Asp Ala Ala Ala Asp 85 Ser Thr Ala Gly Ala 165 Lys	Ala Glu Ala Pro 70 Glu Thr Leu Ser Val 150 Arg	Gly Leu Tyr 55 Ala Arg Glu Asn 135 Ile Ser Ala	Ser Leu 40 Arg Glu Arg Ile Ser 120 Ile Gly Leu Ser	Ser 25 Leu Lys Arg Glu Lys 105 Ala Ser Val Ala Asp 185	10 Gly Arg Ala Ala Glu 90 Ala Ser Gly Ile Pro 170 Thr	Arg Ile Arg 75 Ile Gln Leu Lys Ser 155 Ala Pro	Pro Ala Asp 60 Val Ile Ile Pro Glu 140 Pro Leu Ile	Leu 45 Ser Leu Asp Glu Asn 125 Ser Trp Ala Thr	Glu 30 Ala Gln Leu Trp Trp 110 Arg Arg Asn Leu Gly 190	15 val Ser Arg Glu Ile 95 Gly Val Val Phe Gly 175 Gly	Phe Arg Glu Ala 80 Ile Ala His Tyr Pro 160 Asn Leu
271 272 274 275 277 278 280 281 283 284 286 287 289 290 292 293 295 296 298 299 301 302 304 305	Asp Glu Trp 65 Val Arg Ala Gly Arg 145 Leu Ala	Gly Pro Asp 50 Ala Lys Glu Arg 130 Ala His	Gln Tyr 35 Leu Thr Ile Ser Ala 115 Ile Pro Leu Val	Trp 20 Asn Asp Thr Phe Gly 100 Ile Leu Thr Val 180	Asp Ala Ala Ala Asp 85 Ser Thr Ala Gly Ala 165 Lys	Ala Glu Ala Pro 70 Glu Thr Leu Ser Val 150 Arg	Gly Leu Tyr 55 Ala Arg Glu Asn 135 Ile Ser Ala	Ser Leu 40 Arg Glu Arg Ile Ser 120 Ile Gly Leu Ser	Ser 25 Leu Lys Arg Glu Lys 105 Ala Ser Val Ala Asp 185	10 Gly Arg Ala Ala Glu 90 Ala Ser Gly Ile Pro 170 Thr	Arg Ile Arg 75 Ile Gln Leu Lys Ser 155 Ala Pro	Pro Ala Asp 60 Val Ile Ile Pro Glu 140 Pro Leu Ile	Leu 45 Ser Leu Asp Glu Asn 125 Ser Trp Ala Thr	Glu 30 Ala Gln Leu Trp Trp 110 Arg Arg Asn Leu Gly 190	15 val Ser Arg Glu Ile 95 Gly Val Val Phe Gly 175	Phe Arg Glu Ala 80 Ile Ala His Tyr Pro 160 Asn Leu

VERIFICATION SUMMARY

DATE: 12/07/2001

PATENT APPLICATION: US/09/997,664

TIME: 13:03:08

Input Set : A:\BC1018 US CIP Seq Listing.txt
Output Set: N:\CRF3\12072001\I997664.raw

L:16 M:270 C: Current Application Number differs, Replaced Application Number

L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date